

PATENT CLAIMS:

1. A method for cleaning or emptying a supply line for supplying or charging coating means devices of a coating system, in particular the paint application device of a painting system with coating means such as, for example, paint, for one or a plurality of coating means
5 containers or reservoirs, whereby the supply line has a valve device, which makes it possible to divert coating means volume present in the supply line counter to the direction of flow of back into a coating means reservoir or supply line at the time of processing the coating means, characterized in that, upon each coating means change, the coating means is forced out of the supply line towards the coating means reservoir or towards the supply line by
10 means of the deformation of the supply line.
2. The method according to Claim 1, wherein the supply line is deformed to a zero passage cross-section from the output end progressively towards the coating means reservoir or towards the supply line.
3. The supply line according to Claim 1 to 2, wherein the supply line is deformed by impinging
15 its external periphery using a pressure medium.
4. The method according to Claim 3, wherein a gaseous or liquid pressure medium is used and said gaseous or liquid pressure medium is passed in the interstitial space between the jacket hose or jacket tube of the supply line arranged coaxial to the supply line, along the supply line.
- 20 5. The method according to Claims 1 to 4, wherein a supply line sub-divided into a plurality of supply line segments, is emptied zonewise towards the coating means reservoir by partial impingement of pressure on the external periphery.
6. The method according to Claims 1 to 6, wherein the supply line is finally cleaned with a flushing liquid.
- 25 7. The method according to Claims 1 to 6, wherein the back-deformation of the supply line into its original form is supported by the flushing process. .
8. Supply lines for supplying or charging of coating application devices of a coating system, in particular the paint application device of a painting system with coating means such as, for example, paint, from one or a plurality of coating means containers or reservoirs, whereby
30 the supply line has a valve device, which makes it possible that the coating means volume present in the supply line is displaced counter to the direction of flow back into a coating means container or into a supply line at the time of processing of the coating mean, wherein the supply line can be compressed radially by application of a pressure medium on the external periphery, so that the coating means passage cross-section is minimized and any
35 coating means volume present in the supply line is forced out.
9. The supply line according to Claim 8, wherein the supply line consists of a supple elastic, radially compressible hose and said hose is enveloped by a jacket hose or jacket tube, whereby the interstitial space between the supple elastic hose and jacket hose or jacket tube

by means of at least one valve device communicating with the interstitial space can be impinged with a pressure medium.

10. The supply line according to Claims 8 to 9, wherein the walls of the supply line can be collapsed by impinging of the external periphery with a pressure medium.
- 5 11. The supply line according to Claim 10, wherein the collapsibility of the supply line is favored by corrugations running longitudinally or local material reinforcements.
12. The supply line according to Claims 8 to 10, wherein the radial resistance to deformation of the supply line is less than the radial resistance to deformation of the jacket hose or jacket tube.
- 10 13. The supply line according to Claims 8 to 12, wherein the valve device for impinging the interstitial space between the jacket hose or jacket tube and supply line relative to the direction of flow of the coating means is arranged in the zone of the end of the supply line and impinging of the interstitial space is done with a pressure medium against the direction of flow of the coating means at the time of application of the coating means.
- 15 14. The supply line according to Claims 8 to 13, wherein the interstitial space between the supply line and the jacket hose or jacket hose [sic] is closed gas-tight vis-à-vis the environment and the supply and removal of the pressure medium is done via inlet and outlet valves that are separated from each other.
- 20 15. The supply line according to Claims 8 to 14, wherein the pressure medium is gaseous or liquid.
16. Supply lines according to Claim 15, wherein the pressure medium consists of air and the pressure medium is passed in an open circuit.
17. The supply line according to Claims 8 to 16, wherein the supply line and jacket hose or jacket tube and arranged coaxially with each other and the inner periphery of the jacket hose
25 corresponds approximately to the external periphery of the supply line.
18. The supply line according to Claim 8 to 17, wherein the supply line consists of Teflon (PTFE) or a Teflon – coated carrier hose.
19. The supply line according to Claim 8 to 18, wherein the supply line consists of polyurethane and the jacket hose or jacket tube is comprised of polyamide.